

CLAIMS

We claim:

- 1 1. A monitor for a loss prevention system, comprising:
 - 2 an RF communication circuit adapted for communication with
 - 3 at least one radio frequency identification tag;
 - 4 a control circuit having a microprocessor and a memory, the
 - 5 control circuit being electrically connected to the RF
 - 6 communication circuit;
 - 7 an alarm electrically connected to the microcomputer; and
 - 8 a computer readable program code stored in the memory and
 - 9 executing under control of the microprocessor, the program code
 - 10 having:
 - 11 means for acquiring the identification tag by storing
 - 12 a unique identifier associated with the identification tag
 - 13 in the memory and associating the identifier with an alias;
 - 14 means for dropping the identification tag by deleting
 - 15 the unique identifier associated with the identification
 - 16 tag from the memory;
 - 17 means for operating the RF communication circuit to
 - 18 interrogate the identification tag; and

19 means for causing the alarm to activate when the
20 identification tag is out of range of the RF communication
21 circuit.

1 2. The monitor for a loss prevention system according to
2 claim 1, wherein said RF communication circuit comprises a
3 wireless network interface adapter.

1 3. The monitor for a loss prevention system according to
2 claim 1, wherein said RF communication circuit comprises:

3 transmitting means for broadcasting an RF signal to the
4 radio frequency identification tag; and

5 receiving means for receiving an RF signal from the radio
6 frequency identification tag.

1 4. The monitor for a loss prevention system according to
2 claim 3, further comprising adjusting means for adjusting the
3 sensitivity of said receiving means.

1 5. The monitor for a loss prevention system according to
2 claim 3, further comprising adjusting means for adjusting the
3 signal strength of said transmitting means.

1 6. The monitor for a loss prevention system according to
2 claim 1, further comprising a housing containing said RF
3 communication circuit and said control circuit.

1 7. The monitor for a loss prevention system according to
2 claim 6, further comprising a belt clip.

1 8. The monitor for a loss prevention system according to
2 claim 1, further comprising user interface means for displaying
3 messages to and receiving input from a user, the user interface
4 means being electrically connected to said control circuit.

1 9. The monitor for a loss prevention system according to
2 claim 8, further comprising a housing containing said RF
3 communication circuit, said control circuit, and said user
4 interface means.

1 10. The monitor for a loss prevention system according to
2 claim 9, further comprising a belt clip.

1 11. The monitor for a loss prevention system according to
2 claim 1, wherein said program code further comprises adjusting
3 means for adjusting the sensitivity of said RF communication
4 circuit.

1 . 12. The monitor for a loss prevention system according to
2 claim 1, wherein said alarm is an audible alarm.

1 13. The monitor for a loss prevention system according to
2 claim 1, wherein said alarm is a visual alarm.

1 14. The monitor for a loss prevention system according to
2 claim 1, wherein said alarm is a tactile alarm.

1 15. The monitor for a loss prevention system according to
2 claim 1, wherein said program code further comprises means for
3 controlling an operating range of said RF communication circuit.

1 16. The monitor for a loss prevention system according to
2 claim 1, wherein said program code further comprises means for
3 dropping the identification tag.

1 17. A loss prevention system, comprising:

2 (a) a monitor having:

3 (i) a control circuit including a microprocessor and a
4 memory;

5 (ii) a radio frequency communication circuit connected
6 to the control circuit, including a transmitter and a
7 receiver;

8 (iii) program code stored in the control circuit memory
9 and executing under control of the microprocessor, the
10 program code including:

11 (A) means for causing an interrogation signal to be
12 transmitted by the transmitter;

13 (B) means for acquiring an identification tag number
14 from a response to the interrogation signal, including
15 storing the acquired tag number and associating an
16 alias with the acquired tag number;

17 (c) means for repetitively transmitting the
18 interrogation signal, and for tracking responses to the
19 interrogation signal, including comparing responses to
20 the acquired tag number;

21 (D) means for generating an alarm when the tracked
22 responses fail to include the acquired tag number; and

23 (E) means for dropping the acquired identification tag
24 number from memory; and

25 (b) at least one radio frequency identification tag adapted
26 for attachment to an article to be tracked, the tag having:

27 (i) a memory having a unique identification number
28 stored therein; and

29 (ii) transponder means for receiving the interrogation
30 signal transmitted by the monitor and transmitting the
31 unique identification number in response to the
32 interrogation signal.

1 18. The loss prevention system according to claim 17,
2 further comprising a housing, said RF communication circuit and
3 said control circuit being disposed within the housing, the
4 housing being dimensioned and configured for transport upon a
5 user's person, whereby said monitor is portable.

1 19. The loss prevention system according to claim 17,
2 wherein said monitor and said radio frequency identification tag
3 both further comprise means for communication in a wireless
4 personal area network.